



California ISO
Shaping a Renewed Future

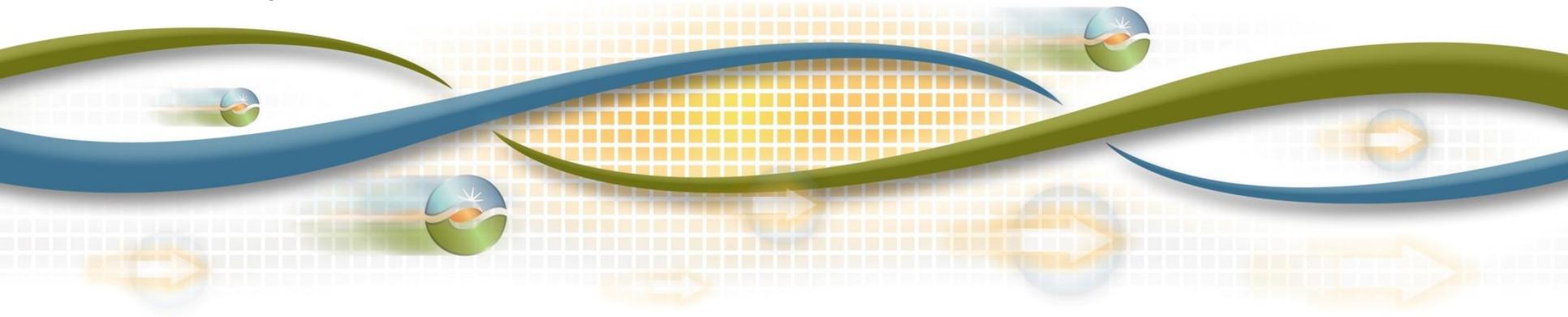
2015 and 2019 Final LCR Study Results - Summary of Findings

Catalin Micsa

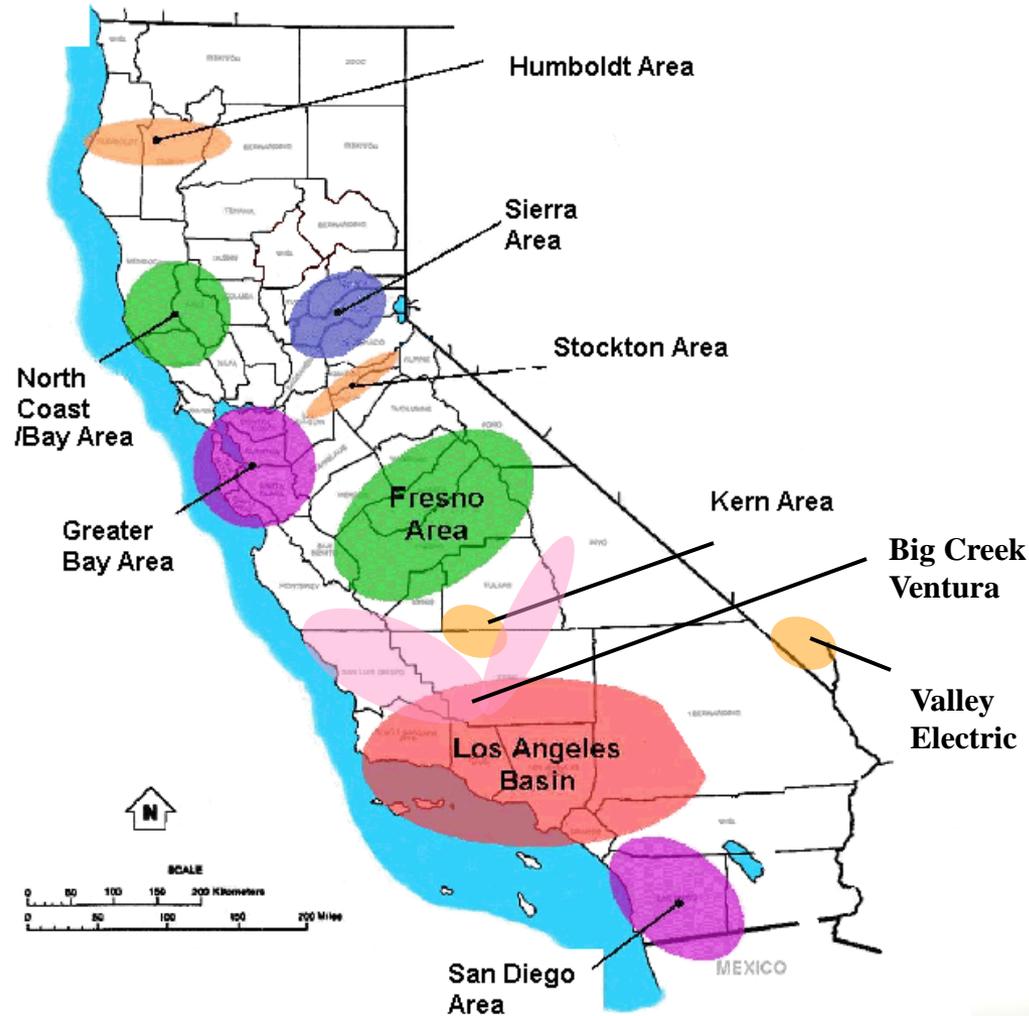
Lead Regional Transmission Engineer

Stakeholder Web Conference

April 10, 2014



LCR Areas within CAISO



Input Assumptions, Methodology and Criteria

See October 30, 2013 stakeholder meeting - for study assumptions, methodology and criteria. The latest information along with the 2015 LCR Manual can be found at:

<http://www.caiso.com/informed/Pages/StakeholderProcesses/LocalCapacityRequirementsProcess.aspx> .

Transmission system configuration – all-projects with EDRO up to June 1, 2015

Generation – all-generation with COD up to June 1, 2015

Load Forecast – 1 in 10 local area peak (based on latest CEC forecast)

Criteria – see report for details

Methodology

1. Maximize Imports Capability into the local area
2. Maintain path flows
3. Maintain deliverability for deliverable units
4. Load pocket – fix definition
5. Performance levels B & C (if equal category B is most stringent)

Major Changes from last year studies

1. **New NQC data.**
2. **Total LCR needs have decreased by 1,000 MW or ~ 3.5% (2015) and decreased by 3,200 MW or ~12% (2019).**
3. **2015 LCR needs decrease in: Humboldt, North Coast/North Bay, Stockton and Bay Area** due to decrease in load forecast, **LA Basin** and **Kern** due to new transmission projects and re-definition respectively.
4. **2015 LCR needs increase in: Big Creek/Ventura and San Diego** due to load growth, **Sierra** due to load growth and delay in transmission projects and **Fresno** due to impacts of the second most stringent contingency.
5. **Valley Electric Area** has been eliminated due to new transmission projects and operating procedures.

Role and Purpose of sub-area LCR needs:

- Provide detail local procurement information
- Need to be satisfied in order to minimize ISO back-stop
- Sum of the parts may not equal the overall need

Total 2015 Final LCR Needs

Local Area Name	Qualifying Capacity			2015 LCR Need Based on Category B			2015 LCR Need Based on Category C with operating procedure		
	QF/ Muni (MW)	Market (MW)	Total (MW)	Existing Capacity Needed	Deficien cy	Total (MW)	Existing Capacity Needed**	Deficien cy	Total (MW)
Humboldt	36	171	207	116	0	116	166	0	166
North Coast / North Bay	130	771	901	550	0	550	550	0	550
Sierra	1299	771	2070	1392	29*	1421	1803	397*	2200
Stockton	197	392	589	357	0	357	396	311*	707
Greater Bay	1262	6243	7505	3492	0	3492	4231	136*	4367
Greater Fresno	316	2532	2848	2393	0	2393	2393	46*	2439
Kern	408	87	495	108	26*	134	411	26*	437
LA Basin	2208	8985	11193	8620	0	8620	9097	0	9097
Big Creek/ Ventura	1160	4203	5363	2095	0	2095	2270	0	2270
San Diego/ Imperial Valley	219	4328	4547	3910	0	3910	3910	202*	4112
Total	7235	28483	35718	23033	55	23088	25227	1118	26345

Total 2019 Draft LCR Needs

Local Area Name	Qualifying Capacity			2019 LCR Need Based on Category B			2019 LCR Need Based on Category C with operating procedure		
	QF/ Muni (MW)	Market (MW)	Total (MW)	Existing Capacity Needed	Deficiency	Total (MW)	Existing Capacity Needed**	Deficiency	Total (MW)
Humboldt	36	171	207	123	0	123	173	0	173
North Coast/ North Bay	130	771	901	310	0	310	516	0	516
Sierra	1299	771	2070	525	0	525	1102	0	1102
Stockton	295	392	687	163	0	163	308	43*	351
Greater Bay	1262	6900	8162	3198	0	3198	4224	0	4224
Greater Fresno	316	2532	2848	1463	0	1463	1545	44*	1589
Kern	225	87	312	156	32*	188	161	32*	193
LA Basin	2207	8985	11192	9059	0	9059	9119	0	9119
Big Creek/Ventura	1160	4203	5363	2499	0	2499	2619	0	2619
Greater San Diego/ Imperial Valley	219	4004	4223	3160	3*	3163	3160	130*	3290
Total	7149	28816	35965	20656	35	20691	22927	249	23176

2015 and 2019 LCR Study Schedule

CPUC and the ISO have determined overall timeline

- Criteria, methodology and assumptions meeting Oct. 30, 2013
- Submit comments by November 13, 2013
- Posting of comments with ISO response by the December 1, 2014
- Base case development started in December 2013
- Receive base cases from PTOs January 3, 2014
- Publish base cases January 15, 2014 – comments by the 29th
- Draft study completed by March 3, 2014
- ISO Stakeholder Web Conf. March 5, 2014 – comments by the 19th
- ISO receives new operating procedures March 19, 2014
- Validate op. proc. – publish draft final report April 3, 2014
- ISO Stakeholder meeting April 10, 2014 – comments by the 24th
- Final 2015 LCR report April 30, 2014



2014 ISO Procurement Schedule

Per ISO Tariff and BPM - overall timeline

- Final LCR Report April 30, 2014
- LSE self-guided local allocation; first week in May, 2014
- Receive new CEC coincident load forecast June 30, 2014
- ISO or CPUC to send out final local allocation; middle of July, 2014
- If Oakland under contract; LSEs to submit showings by 9/15/2014
- ISO to decide on retaining units under RMR by October 1, 2014
- Final LSE showings TBD – Usually last week of October, 2014
- ISO to send a market notice out stating deficiencies in procurement – about 3 weeks after final showing - about November 21, 2014
- ISO receives additional showing (30 days after market notice)
- ISO to enter back-stop procurement for local reasons (if needed)

Your comments and questions are welcome.

For written comments, please send to: RegionalTransmission@caiso.com